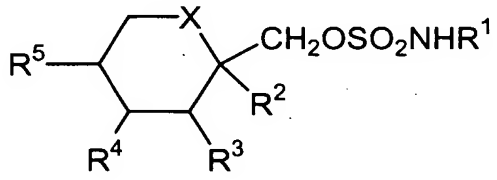
What is claimed is:

1. A method for treating Type II diabetes mellitus in mammals afflicted with such condition comprising administering to said mammal a therapeutically effective amount of a compound of the formula I:



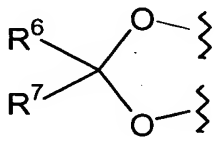
(I)

wherein

X is CH_2 or oxygen;

R^1 is hydrogen or alkyl; and

R^2, R^3, R^4 and R^5 are independently hydrogen or lower alkyl and, when X is CH_2, R^4 and R^5 may be alkene groups joined to form a benzene ring and, when X is oxygen, R^2 and R^3 and/or R^4 and R^5 together may be a methylenedioxy group of the following formula (II):



(II)

wherein

R^6 and R^7 are the same or different and are hydrogen, lower alkyl or are alkyl and are joined to form a cyclopentyl or cyclohexyl ring;

in combination with a therapeutically effective amount of one or more anti-diabetic agent.

2. The method of claim 1 wherein the compound of formula I is topiramate.

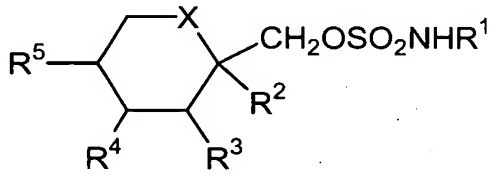
3. The method of claim 1, wherein the therapeutically effective amount of the compound of formula I is from about 32 to 512 mg.

4. The method of claim 1, wherein the therapeutically effective amount of the compound of formula I is of from about 16 to 256 mg once or twice daily.

5. The method of Claim 1 wherein the anti-diabetic agent is selected from the group consisting of a sulfonylurea, a meglitinide, an agents which modify insulin secretion, a biguanide, a thiazolidinedione, a peroxisome proliferator-activated receptor-gamma agonist (PPAR-gamma), a Retinoid-X receptor (RXR) modulator, an insulin sensitizing agent, an alpha-glucosidase inhibitor, an insulin, a small molecule mimics of insulin, Na a-glucose co-transporter inhibitor, an amylin agonists and a glucagon antagonist.

6. The method of Claim 1 wherein the anti-diabetic agent is selected from the group consisting of metformin, a sulfonylureas, a thiazolidinediones and insulin.

7. A method of treating Syndrome X (Insulin Resistance Syndrome, Metabolic Syndrome, or Metabolic Syndrome X) in mammals afflicted with such condition comprising administering to said mammal a therapeutically effective amount of a compound of the formula I:



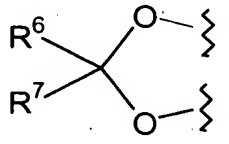
(I)

wherein

X is CH_2 or oxygen;

R^1 is hydrogen or alkyl; and

R^2, R^3, R^4 and R^5 are independently hydrogen or lower alkyl and, when X is CH_2, R^4 and R^5 may be alkene groups joined to form a benzene ring and, when X is oxygen, R^2 and R^3 and/or R^4 and R^5 together may be a methylenedioxy group of the following formula (II):



(II)

wherein

R^6 and R^7 are the same or different and are hydrogen, lower alkyl or are alkyl and are joined to form a cyclopentyl or cyclohexyl ring;

in combination with a therapeutically effective amount of one or more anti-diabetic agent.

8. The method of claim 8 wherein the compound of formula I is topiramate.

9. The method of claim 8, wherein the therapeutically effective amount of the compound of formula I is from about 32 to 512 mg.

10. The method of claim 8, wherein the therapeutically effective amount of the compound of formula I is of from about 16 to 256 mg once or twice daily.

11. The method of Claim 8 wherein the anti-diabetic agent is selected from the group consisting of a sulfonylurea, a meglitinide, an agents which modify insulin secretion, a biguanide, a thiazolidinedione, a peroxisome proliferator-activated receptor-gamma agonist (PPAR-gamma), a Retinoid-X receptor (RXR) modulator, an insulin sensitizing agent, an alpha-glucosidase inhibitor, an insulin, a small molecule mimics of insulin, Na a-glucose co-transporter inhibitor, an amylin agonists and a glucagon antagonist.

12. The method of Claim 1 wherein the anti-diabetic agent is selected from the group consisting of metformin, a sulfonylureas, a thiazolidinediones and insulin.